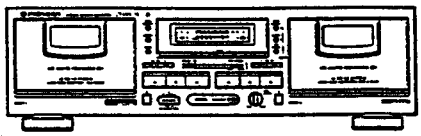
PIONEER
The Art of Entertainment

Service Manual



ORDER NO.
RRV1082

STEREO DOUBLE CASSETTE DECK

CT-W503R

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	The voltage can be converted by the following method.
	CT-W503R		
KUXJ	O	AC120V	—
HEMXJ	O	AC220 – 230V	AC230V – 240V, *
HBXJ	O	AC230 – 240V	AC220 – 230V, *
HPW	O	AC230V – 240V	AC220 – 230V, *
SD	O	AC110V/120 – 127V/220V/240V	With the voltage selector

*: Alter the wiring of the Power-supply block at the primary winding of power transformer referring to the "Line Voltage Selection" described in Service Manual.

CONTENTS

1. SAFETY INFORMATION ····· 2
2. PACKING AND PARTS LIST ····· 3
3. EXPLODED VIEWS AND PARTS LIST ····· 4
4. TEST MODE ····· 10
5. ADJUSTMENTS ····· 11
6. BLOCK DIAGRAM ····· 14
7. PCB CONNECTION DIAGRAM ····· 15
8. SCHEMATIC DIAGRAM ····· 23
9. PCB PARTS LIST ····· 26
10. IC INFORMATION ····· 30
11. FL INFORMATION ····· 32
12. PANEL FACILITIES ····· 33
13. SPECIFICATIONS ····· 34

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVICE INC. P.O. Box 1760, Long Beach, California 90801 U.S.A.
PIONEER ELECTRONICS OF CANADA, INC. 300 Allstate Parkway Markham, Ontario L3R 0P2 Canada
PIONEER ELECTRONIC [EUROPE] N.V. Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL: [03] 580-9911

© PIONEER ELECTRONIC CORPORATION 1994

T – SSG MAR. 1994 Printed in Japan

4186

3. EXPLODED VIEWS AND PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

1. EXTERIOR

● CONTRAST OF KUXJ, HEMXJ, HBXJ, HPW AND SD TYPES

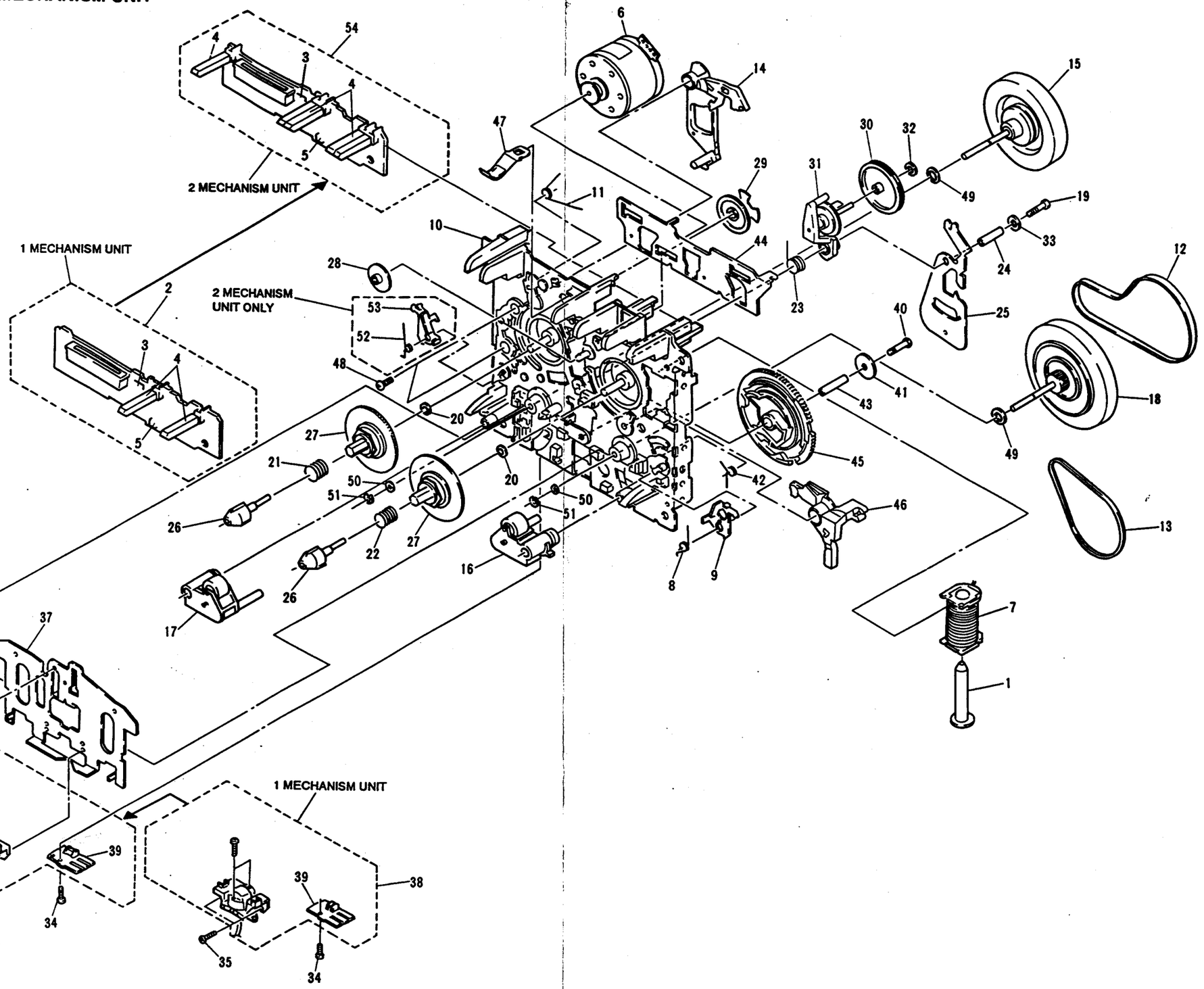
KUXJ, HEMXJ, HBXJ, HPWand SD types have the same construction except for the following:

Mark	No.	Symbol & Description	Part No.					Remarks
			KUXJ type	HEMXJ type	HBXJ type	HPW type	SD type	
	1	Main Unit	RWZ3192	RWZ3182	RWZ3182	RWZ3182	RWZ3182	
	2	Sub Unit	RWZ3193	RWZ3183	RWZ3183	RWZ3183	RWZ3183	
NSP	3	Transformer 1 Unit	Not Used	Not Used	Not Used	Not Used	RWZ3184	
NSP	3	Transformer 1 PCB	RNZ2602	RNZ2597	RNZ2597	RNZ2675	RNZ2675	
NSP	4	Transformer 2 Unit	RWZ3195	RWZ3185	RWZ3185	RWZ3185	RWZ3185	
⚠	5	Strain Relief	CM – 22C	CM – 22B	CM – 22B	CM – 22B	CM – 22B	
⚠	6	Fuse (FU1001, FU1002 1.5A)	REK1059	Not Used	Not Used	Not Used	Not Used	
⚠	6	Fuse (FU1001, FU1002 T1.6A)	Not Used	REK1024	REK1024	REK1024	REK1024	
⚠	7	AC Power Cord	PDG1015	PDG1003	PDG1055	RDG1022	PDG1013	
⚠	9	Power Transformer (AC120V)	RTT1223	Not Used	Not Used	Not Used	Not Used	
⚠	9	Power Transformer (AC220 – 230/230 – 240V)	Not Used	RTT1276	RTT1276	RTT1276	Not Used	
⚠	9	Power transformer (AC110/120 – 127/220/240V)	Not Used	Not Used	Not Used	Not Used	RTT1272	
	12	Rubber Sheet	AEB1111	Not Used	Not Used	AEB1111	AEB1111	
	14	Foot Assy	AEC1531	Not Used	Not Used	AEC1531	AEC1531	
NSP	21	Main Chassis	RNB1091	RNB1091	RNB1091	RNB1089	RNB1089	
	31	FL Lens	RAH2374	RAH2375	RAH2375	RAH2374	RAH2374	
	32	Front Panel	RAH2361	RAH2362	RAH2362	RAH2393	RAH2393	
	38	Rear Panel	RNA1782	PNA1784	RNA1785	RNA1789	RNA1786	
	52	65 Label	ORW1069	Not Used	Not Used	Not Used	Not Used	
NSP	58	Fuse Caution Label	RRW – 111	Not Used	Not Used	Not Used	Not Used	
	59	Pin Cap	Not Used	Not Used	VEC1616	Not Used	Not Used	
⚠	60	Voltage Selector (AC110/120 – 127/220/240V)	Not Used	Not Used	Not Used	Not Used	PSB1002	
	61	Insulator	Not Used	PNW1912	PNW1912	Not Used	Not Used	
⚠	62	Fuse (T5A)	Not Used	Not Used	PEK1003	Not Used	Not Used	

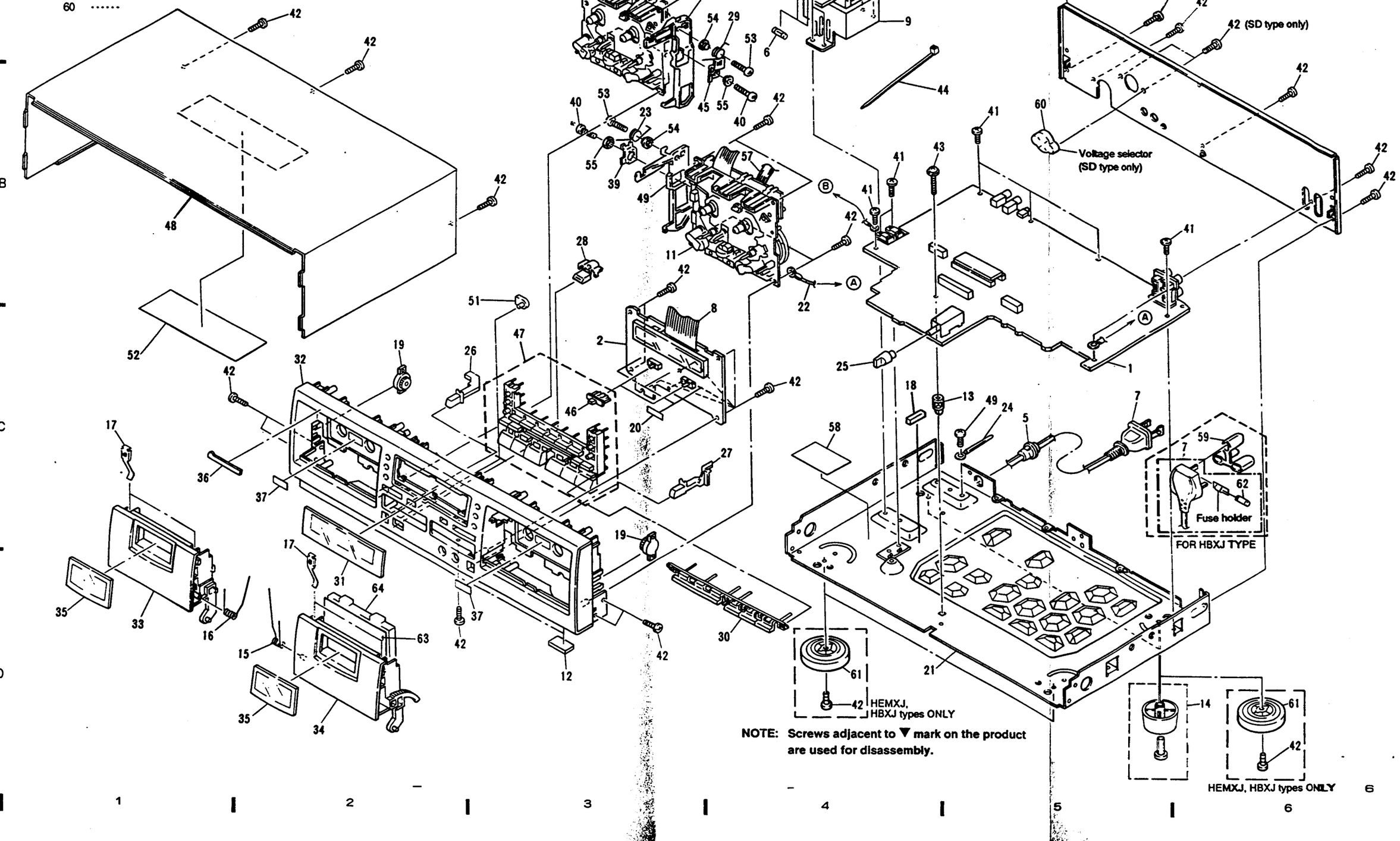
● PARTS LIST FOR KUXJ TYPE

Mark	No.	Description	Part No.
	1	Main Unit	RWZ3192
	2	Sub Unit	RWZ3193
NSP	3	Transformer 1 PCB	RNZ2602
NSP	4	Transformer 2 Unit	RWZ3195
⚠	5	Strain Relief	CM – 22C
⚠	6	FU1001, FU1002 Fuse (1.5A)	REK1059
⚠	7	AC Power Cord	PDG1015
	8	Lead Card 31P	RDD1299
⚠	9	Power Transformer	RTT1223
	10	1 Mechanism Unit (DECK I)	RYM1230
	11	2 Mechanism Unit (DECK II)	RYM1231
	12	Rubber Sheet	AEB1111
NSP	13	PCB Spacer	PNY – 404
	14	Foot Assy	AEC1531
	15	Door Spring L	RBH1304
	16	Door Spring R	RBH1305
	17	Half Pressure Spring	RBK1004
NSP	18	Spacer	REB1257
	19	Damper Assy	REC1005
	20	Knob Spacer	REC1195
NSP	21	Main Chassis	RNB1091
NSP	22	Earth Lead Unit	XDF – 504
	23	Eject Spring L	RBH1379
	24	Cord Clamper	RNH – 184
	25	Balance Knob	RAC1705
	26	Eject Knob L	RAC1881
	27	Eject Knob R	RAC1882
	28	Power Knob	RAC1883
	29	Eject Spring R	RBH1380
	30	REC Knob B	RAC1788
	31	FL Lens	RAH2374
	32	Front Panel	RAH2361
	33	Door Pocket L	RAH2396
	34	Door Pocket R	RAH2398
	35	Door Lens	RAH2435
	36	Name Plate	RAM1007
	37	Remain Display Paper	REE – 113
	38	Rear Panel	RNA1782
	39	Eject Arm L	RNE1763
	40	Screw	BCZ26P050FMC
	41	Screw	BBZ30P060FMC
	42	Screw	BBZ30P080FZK
	43	Screw	IBZ30P150FCU
NSP	44	Binder	Z09 – 057
	45	Eject Arm R	RNE1764
	46	Slide Knob	REA1078
	47	Control Knob	RAC1878
	48	Bonnet	REA1077

2. 1 MECHANISM UNIT AND 2 MECHANISM UNIT



Mark	No.	Description	Part No.
	49	Eject Lever L	RNK2045
	50	Eject Lever R	RNK2046
	51	LED Lens	PNW2019
	52	65 Label	ORW1069
	53	Screw	BSZ26P120FMC
NSP	54	Eject Collar	RLA1283
NSP	55	Arm Collar	RLA1290
	56	Connector Assy 3P	RKP1678
	57	Connector Assy 5P	RKP1677
NSP	58	Fuse Caution Label	RRW – 111
	59	.....	
	60	.....	
	61	.....	
	62	.....	
	63	Caution Sheet	RRN1006
	64	Protector	RHC1053

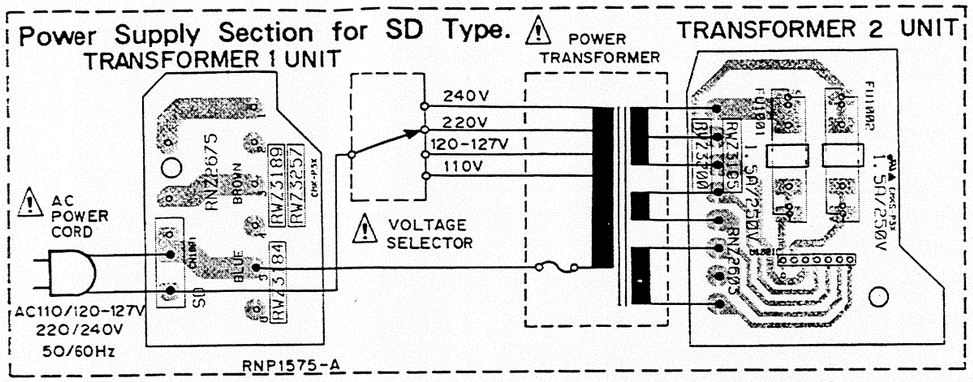


NOTE: Screws adjacent to ▼ mark on the product are used for disassembly.

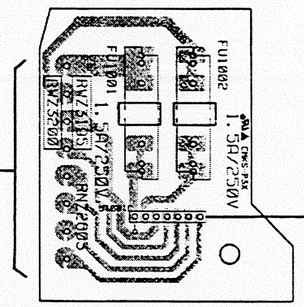
Parts List

Mark	No.	Description	Part No.
	1	PLUNGER	RLA1288
	2	PCB CONTROL BLK (1 MECHANISM UNIT)	RXA1623
	3	PUSH SWITCH	RSG1018
	4	SPLF	RSN1023
	5	PHOTO – TRANSISTOR	SPI33534FG
	6	MTR MAIN BLK	RXM1075
	7	SOLENOID BLK	RXP1021
	8	SPRING INTERLOCK R	RBH1386
	9	ARM INTERLOCK R	RNE1781
	10	CHASSIS BASE BLK	RXA1626
	11	SPRING BRAKE	RBH1387
	12	MAIN BELT	REB1157
	13	F/R BELT	REB1254
	14	LEVER BRAKE	RNK2071
	15	F/W ASSY	RXA1428
	16	PINCH ROLLER BLK R	RXA1628
	17	PINCH ROLLER BLK L	RXA1629
	18	CLUTCH BLK ASSY	RXA1631
	19	SCREW	RBA1113
	20	WASHER 2.1x0.25T	RBF1038
	21	SPRING REEL (L)	RBH1388
	22	SPRING REEL (R)	RBH1389
	23	CAM SPRING	RBH1393
	24	SPACER	RLA1286
	25	LEVER F/R	RNE1782
	26	REEL FEATHER	RNK2072
	27	REEL BASE	RNK2073
	28	PLAY GEAR (A)	RNK2074
	29	FF GEAR (A)	RNK2075
	30	F/R PULLEY	RNK2076
	31	CLUTCH BLK ASSY	RXA1632
	32	WASHER	WA17D040D025
	33	WASHER	WA23F060M040
	34	SCREW	PCZ20P040FMC
	35	SCREW	RBA1077
	36	SPRING HB	RBH1390
	37	HEAD BASE	RNE1783
	38	PLATE HD BLK (1 MECHANISM UNIT)	RXA1633
	39	HD PCB 5P	RXA1635
	40	SCREW	RBA1113
	41	WASHER 2.0x0.3	RBE1009
	42	SPRING ARM PLAY	RBH1392
	43	SPACER	RLA1286
	44	PLATE SLIDE	RNE1785
	45	CAM GEAR	RNK2078
	46	ARM PLAY	RNK2079
	47	SPRING CASSETTE	RNE1786
	48	SCREW	BMZ26P040FZK
	49	WASHER	WA26D045D025
	50	WASHER	WA26D047D050
	51	STOP RING	YE15FUC
	52	SPRING INTERLOCK L (2 MECHANISM UNIT ONLY)	RBH1385
	53	ARM INTERLOCK L (2 MECHANISM UNIT ONLY)	RNE1780
	54	PCB CONTROL BLK (2 MECHANISM UNIT)	RXA1624
	55	PLATE HD BLK (2 MECHANISM UNIT)	RXA1634

• This diagram is viewed from the mounted parts side.

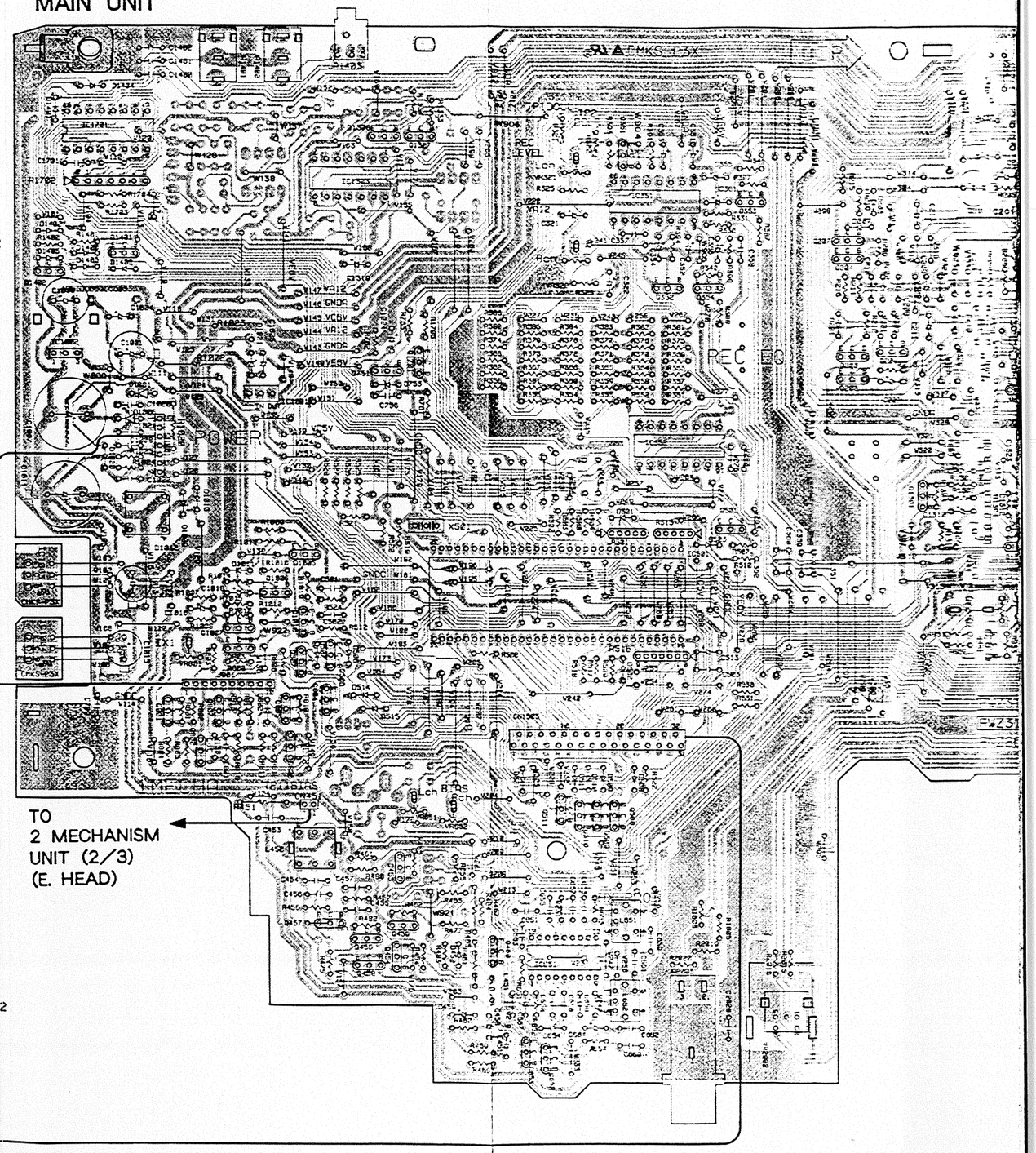


TRANSFORMER 2 UNIT

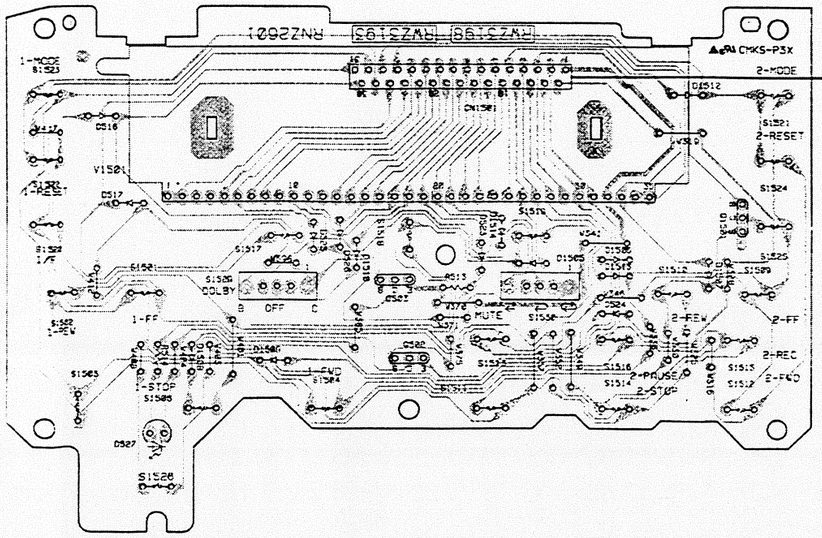


TO POWER TRANSFORMER

MAIN UNIT

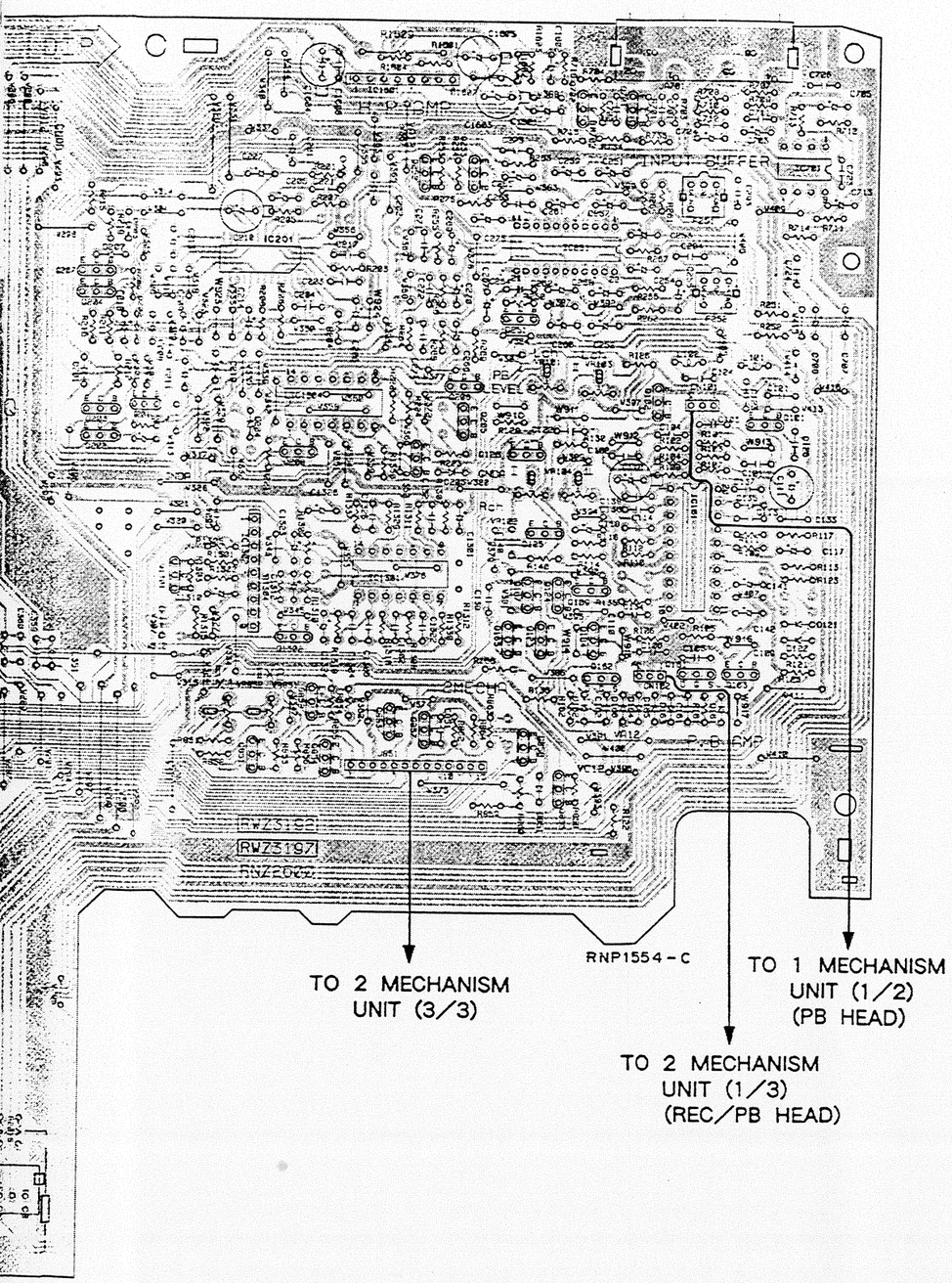


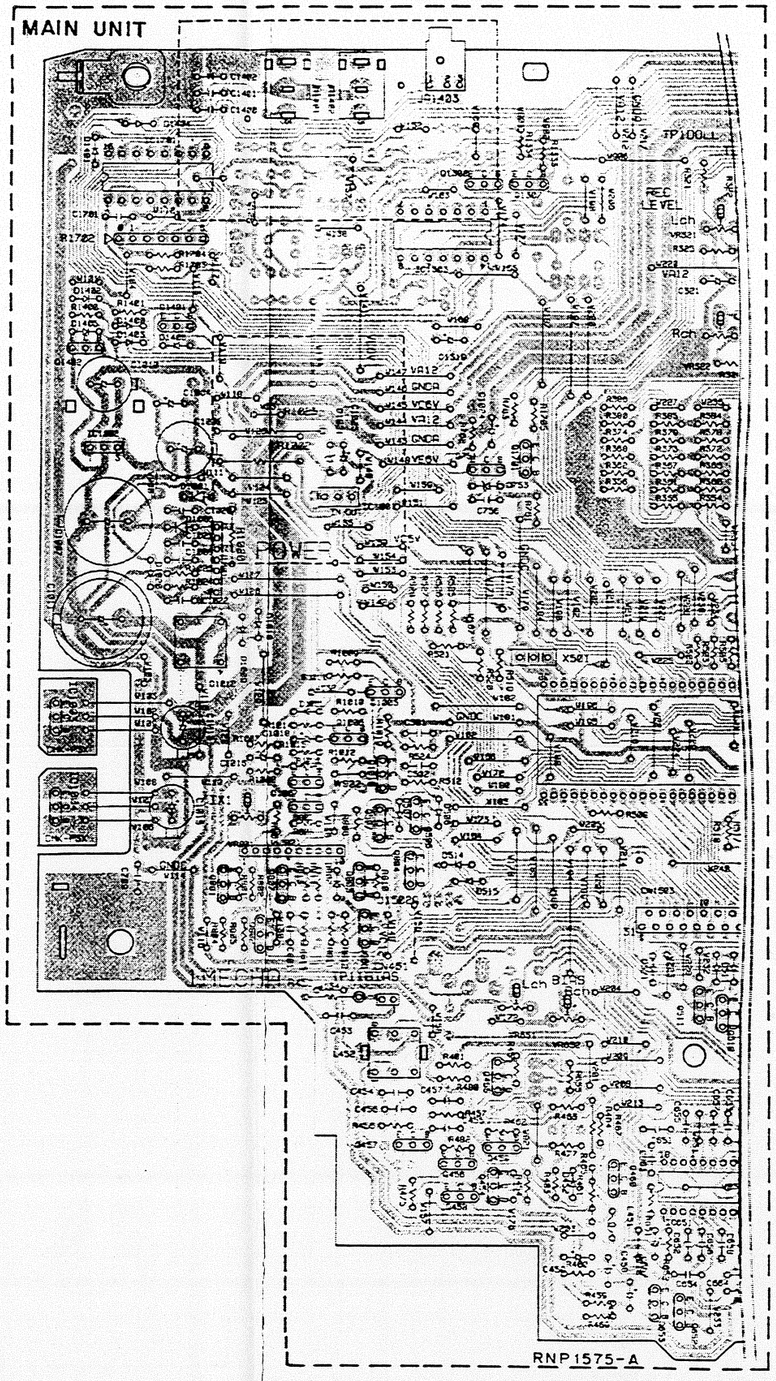
SUB UNIT



The parts enclosed by [ ] are different from those of others destinations. (The schematic diagrams are the same).

(SD Type ONLY)





NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
B C E	B C E B C E	Transistor
B C E	B C E B C E	Transistor with resistor
D G S	D G S D G S	Field effect transistor
		Resistor array
		3- terminal regulator

SCHEMATIC DIAGRAM

MAIN UNIT
(RWZ3192:KUXJ)
(RWZ3182:SD,HBXJ,HEMXJ,
HPW)

CHANISM UNIT
)
11233)

PLATE HD BLK
RXA1633
PB HEAD

CHANISM UNIT
11234)

PLATE HD BLK
RXA 1634
REC/PB HEAD

P.B AMP

-74dBV

IC101 PB EQ AMP
CXA1115BP

IC251: DOLBY B/C NR

IC251
CXA1562S

-7.2dBV

IC201: FLEX (I/f) SYSTEM

IC201
PA8859AM

REC EQ

REC LEVEL ADJ.

HX PRO

BIAS ADJ

IC651
UPC1297CA

BIAS OSC

RXA1634
E.HEAD

2 MECHANISM UNIT
(2/3)
(RYM1234)

1 MECHANISM UNIT
(2/2)(RYM1233)

MECHANISM

RXM1075

RSG1018
SPI33534FG

RXP1021

RSN1023

2 MECHANISM UNIT
(3/3)
(RYM1234)

MECHANISM 2

RXM1075

RSG1018
SPI33534FG

RXP1021

RSN1023

Power Supply Section for HBXJ, HEMXJ and HPW Types.

TRANSFORMER 1 PCB
(RNZ2602:HBXJ,HEMXJ,
HPW)

AC POWER CORD

NEUTRAL
LIVE
220 - 230V
230 - 240V
HEMXJ TYPE
HBXJ,HPW TYPE
T.F

HBXJ : PDG1055
HEMXJ : PDG1003
HPW : PDG1022

POWER
TRANSFORMER
RTT 1224

AC POWER CORD
AC110/120-127/220/240V
50/60Hz

NEUTRAL
LIVE
PDG1015

POWER
TRANSFORMER
RTT1272

YEL
TTBV
220V
GRAY
240V

TRANSFORMER 1 UNIT
(RWZ3184:SD)

Power Supply Section for SD Type.

Line Voltage Selection

Line voltage can be chaged by the following modification :
1. Disconnect the AC power cord.
2. Remove the cover.
3. Change the connection of TRANSFORMER 1 PCB primary pins.
4. Stick a line voltage label on the rear panel.

Part No.	Description
AAX - 193	220V label
AAX - 192	240V label

AC POWER CORD
AC120V 60HZ

NEUTRAL
LIVE
PDG1015

POWER
TRANSFORMER
RTT1223

FU1001, FU1002
1.5A/250V:KUXJ
T1.6AL250V:
SD,HBXJ,
HEMXJ,HPW

TRANSFORMER 1 PCB
(RNZ 2602:KUXJ)

TRANSFOMER 2 UNIT
(RWZ3195:KUXJ)
(RWZ3185:SD,HBXJ,HEMXJ,HPW)

POWER SUPPLY

SIGNAL ROUTE
⇨ : PLAY BACK SIGNAL
➡ : RECORDING SIGNAL

IC201: FLEX(I/f) SYSTEM

*1 FLEX System: Freguency Level Expander System.

INPUT BUFFER

IC201 PA8059AM

IC1302: LOGARITHMIC COMPRESSION AMPLIFER

IC1302 BA6198

IC1381 (1/4) BA14741

IC1381 (2/4) BA14741

IC1381 (3/4) BA14741

IC1381 (4/4) BA14741

IC1383 (1/4)

IC1383 (2/4)

IC701 (1/2) XRA15218

IC701 (2/2) XRA15218

JA701 (1/4)

JA701 (3/4)

JA701 (2/4)

JA701 (4/4)

H. PHONE AMP

IC1681 (1/2) BA15218N

IC1681 (2/3) BA15218N

IC1701 MC14050BCP

1 MECHANISM UNIT (2/2)(RYM1233)

MECHANISM 1 CONTROL

RXM1075

RSN1023

2 MECHANISM UNIT (3/3) (RYM1234)

MECHANISM 2 CONTROL

RXM1075

RSN1023

IC501: SYSTEM CONTROL

IC501 PD4587A

CT-W503R ONLY

CD SYNC.

RESET

SR

SR JACK

RKN1004

RKN1004

RAW1132

V1501

CN1503 52045-3145

CN1501 98033-31P

S1501–1527: RSG1034

S1503: 1-REV
S1517 AUTO-NR
S1520: FLEX
S1525 CDSYNC
S1530: RSH1041-A-T

SUB UNIT
(RWZ3193:KUXJ)
(RWZ3183:SD,HBXJ,HEMXJ,HPW)

NOTE: If the parts are not identified in the diagram the followings are used.

ISS254			
2SA1309A(R/S)		DTC114TS	
2SC3311A(R/S)		XDA114ES	
DTA114TS		XDC124ES	

ER SUPPLY

9. PCB PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, b to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5% K=10%).

560 Ω → 56 × 10¹ → 561 ..... RD1/8PM 5 6 1 J
47k Ω → 47 × 10³ → 473 ..... RD1/4PS 4 7 3 J
0.5 Ω → 0R5 ..... RN2H 0 R 5 K
1 Ω → 010 ..... RS1P 0 1 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω → 562 × 10¹ → 5621 ..... RN1/4PC 5 6 2 1 F

LIST OF WHOLE PCB ASSEMBLIES

Mark	PCB Assemblies	Part No.					Remar
		KUXJ type	HEMXJ type	HBXJ type	HPW type	SD type	
⚠NSP	MOTHER UNIT	RWM1688	RWM1686	RWM1686	RWM1686	RWM1726	
	├MAIN UNIT	RWZ3192	RWZ3182	RWZ3182	RWZ3182	RWZ3182	
	├SUB UNIT	RWZ3193	RWZ3183	RWZ3183	RWZ3183	RWZ3183	
NSP	├TRANSFORMER 2 UNIT	RWZ3195	RWZ3185	RWZ3185	RWZ3185	RWZ3185	
NSP	└TRANSFORMER 1 UNIT	Not Used	Not Used	Not Used	Not Used	RWZ3184	

MAIN UNIT

RWZ3192 and RWZ3182 have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		RWZ3192	RWZ3182	
	C1011	RCH1116	RCH1120	

SUB UNIT

Although RWZ3193 and RWZ3183 are different in part number, they consist of the same components.

TRANSFORMER 2 UNIT

Although RWZ3195 and RWZ3185 are different in part number, they consist of the same components.

TRANSFORMER 1 UNIT (SD type only)

This unit has no service parts.

: when replacing, be sure

: unavailable.

is shown by J=5%, and

	Remarks
;D type	
WM1726	
WZ3182	
WZ3183	
WZ3185	
WZ3184	

Remarks

• PARTS LIST FOR KUXJ TYPE

Mark	No.	Description	Part No.

MAIN UNIT

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC1001	REGULATOR IC	NJM79L06A
⚠	IC1002	REGULATOR IC	NJM78M06FA
⚠	IC1003, IC1004	REGULATOR IC	NJM7812FA
	IC101	PB-EQ AMP IC	CXA1115BP
	IC1301	OP-AMP IC	BA14741
	IC1302		BA6138
	IC1303	COMPARATOR	XRA10339
	IC1304	LOGIC IC	MC14066BCP
	IC1601	OP-AMP IC	XRA15218N
	IC1701	LOGIC IC	MC14050BCP
	IC201	FLEX IC	PA0059AM
	IC251	DOLBY B/C IC	CXA1562S
	IC351	REC EQUALIZER IC	CXA1198AP
	IC352	LOGIC IC	MC14051BCP
	IC501	MCU	PD4507A
	IC651	DOLBY HX PRO IC	UPC1297CA
	IC701	OP-AMP IC	XRA15218
	Q1005	TRANSISTOR	2SA1309A
	Q1006, Q1007	TRANSISTOR	2SC3311A
	Q101	TRANSISTOR	XDC124ES
	Q1010	DIGITAL TRANSISTOR	XDA114ES
	Q102	TRANSISTOR	XDC124ES
	Q109, Q123	DIGITAL TRANSISTOR	DTC114TS
	Q124	DIGITAL TRANSISTOR	DTC114TS
	Q125, Q126	DIGITAL TRANSISTOR	DTC115TS
	Q1301, Q1302	TRANSISTOR	XDC124ES
	Q1307, Q1308	TRANSISTOR	XDC124ES
	Q1350	TRANSISTOR	XDC124ES
	Q1401	DIGITAL TRANSISTOR	DTA114TS
	Q1402	TRANSISTOR	XDC124ES
	Q161, Q162	N-FET	2SK373
	Q163, Q164	DIGITAL TRANSISTOR	DTC114TS
	Q165	DIGITAL TRANSISTOR	XDA114ES
	Q167, Q1701	TRANSISTOR	XDC124ES
	Q201	DIGITAL TRANSISTOR	DTC114TS
	Q202	TRANSISTOR	2SA1309A
	Q203, Q204	TRANSISTOR	XDC124ES
	Q205	TRANSISTOR	2SC3311A
	Q206	DIGITAL TRANSISTOR	DTC114TS
	Q207, Q208	TRANSISTOR	XDC124ES
	Q251-Q253	TRANSISTOR	XDC124ES
	Q351, Q352	DIGITAL TRANSISTOR	DTC114TS
	Q353, Q354	TRANSISTOR	2SD2144S
	Q454, Q455	TRANSISTOR	2SC3311A
	Q456, Q457	TRANSISTOR	2SC1815
	Q458	TRANSISTOR	2SD2144S
	Q459	TRANSISTOR	2SC3311A
	Q460	TRANSISTOR	2SB1238X
	Q501	DIGITAL TRANSISTOR	DTA114TS
	Q506-Q509	DIGITAL TRANSISTOR	XDA114ES
	Q510, Q511	DIGITAL TRANSISTOR	DTA114TS
	Q652	DIGITAL TRANSISTOR	XDA114ES
	Q653	TRANSISTOR	XDC124ES
	Q701, Q702	TRANSISTOR	2SD2144S
	Q751	DIGITAL TRANSISTOR	DTA114TS
	Q801	TRANSISTOR	2SA1309A
	Q802	TRANSISTOR	XDC124ES
	Q803	TRANSISTOR	2SB1425
	Q804	TRANSISTOR	XDC124ES
	Q805	TRANSISTOR	2SB1238X
	Q806	TRANSISTOR	XDC124ES
	Q807	TRANSISTOR	2SC3311A
	Q851	TRANSISTOR	2SA1309A
	Q852	TRANSISTOR	XDC124ES
	Q853	TRANSISTOR	2SB1425
	Q854	TRANSISTOR	XDC124ES
	Q855	TRANSISTOR	2SB1238X
	Q856	TRANSISTOR	XDC124ES
	Q857	TRANSISTOR	2SC3311A
⚠	D1001, D1006	DIODE	1SR35-100A
⚠	D1009, D1010	DIODE	1SS254
	D1011	DIODE	1SS254
⚠	D1012		S2VB20
⚠	D1020	ZENER DIODE	MTZJ3.3B
	D1021	ZENER DIODE	MTZJ5.1B
	D121, D122	DIODE	1SS254
	D1400-D1406	DIODE	1SS254
	D161-D166	DIODE	1SS254
	D201-D205	DIODE	1SS254
	D207	DIODE	1SS254
	D452	DIODE	1SS252
	D501	DIODE	1SS254
	D502	ZENER DIODE	MTZJ9.1A
	D503, D506	DIODE	1SS254
	D507-D511	DIODE	1SS254
	D514, D515	DIODE	1SS254
	D521	DIODE	1SS254
	D753	ZENER DIODE	MTZJ3.9B
	D802, D851	DIODE	11ES2

COILS AND FILTERS

No.	Description	Part No.
F251, F252	FILTER	RTF1208
L101, L102	COIL	RTF1099
L351, L352	COIL	RTF1102
L451	RADIAL INDUCTOR	LFA121K
L452		RTD1048
L651, L652	COIL	RTD1046

CAPACITORS

No.	Description	Part No.
C1001	ELECT. CAPACITOR	CEAS221M50
C1004	ELECT. CAPACITOR	CEAS330M35
C1007	ELECT. CAPACITOR	PCH1116
C1008	CERAMIC CAPACITOR	CKCYF473Z50
C101	AXIAL CAPACITOR	CKPUYB561K5
C1010	ELECT. CAPACITOR	PCH1117
C1011	ELECT. CAPACITOR	RCH1116
C1013, C1015	ELECT. CAPACITOR	CEAS331M16
C1016	ELECT. CAPACITOR	CEAS100M50

NOTE FOR SCHEMATIC DIAGRAMS (Type 6A)

1. When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".

9. SWITCHES (Underline indicates switch position):

SUB UNIT

Mark	No.	Description	Part No.
	C1018	ELECT. CAPACITOR	CEAS220M50
	C102	AXIAL CAPACITOR	CKPUYB561K50
	C1020-C1022	CERAMIC CAPACITOR	CKCYF473Z50
	C1024, C1025	ELECT. CAPACITOR	CEAS470M16
	C103, C104	AXIAL CAPACITOR	CKPUYB471K50
	C105, C106	CERAMIC CAPACITOR	CKPUYB102K50
	C111, C112	ELECT. CAPACITOR	CEANL101M10
	C113, C114	AUDIO FILM CAPACITOR	CFTXA822J50
	C117, C118	ELECT. CAPACITOR	CEAS4R7M50
	C121, C122	AXIAL CAPACITOR	CKPUYB221K50
	C123, C124	AXIAL CAPACITOR	CKPUYB391K50
	C126	CERAMIC CAPACITOR	CKCYF473Z50
	C1301	ELECT. CAPACITOR	CEAS4R7M50
	C1302	CERAMIC CAPACITOR	CGCYX473K25
	C1304, C1306	CERAMIC CAPACITOR	CGCYX332K25
	C1310, C1312	ELECT. CAPACITOR	CEAS4R7M50
	C1319	ELECT. CAPACITOR	CEAS470M16
	C1321, C1322	AXIAL CAPACITOR	CKPUYB101K50
	C1323, C1324	ELECT. CAPACITOR	CEAS4R7M50
	C1325	AXIAL CAPACITOR	CKPUYB821K50
	C1326	ELECT. CAPACITOR	CEASR33M50
	C133, C134	AXIAL CAPACITOR	CKPUYB681K50
	C135-C138	AXIAL CAPACITOR	CKPUYB101K50
	C139	CERAMIC CAPACITOR	CKCYF473Z50
	C140, C1400	CERAMIC CAPACITOR	CKCYF103Z50
	C1401	CERAMIC CAPACITOR	CKCYF473Z50
	C1402	CERAMIC CAPACITOR	CKCYF103Z50
	C141, C142	ELECT. CAPACITOR	CEAS470M16
	C1601, C1602	ELECT. CAPACITOR	CEASR22M50
	C1603, C1604	ELECT. CAPACITOR	CEAS101M16
	C1605	ELECT. CAPACITOR	CEAS331M16
	C1607, C1608	AXIAL CAPACITOR	CKPUYB221K50
	C161, C162	AXIAL CAPACITOR	CCPUSL100J50
	C1701	CERAMIC CAPACITOR	CKCYF473Z50
	C201, C202	ELECT. CAPACITOR	CEAS4R7M50
	C2020	CERAMIC CAPACITOR	CKCYF473Z50
	C203, C204	AUDIO FILM CAPACITOR	CFTYA103J50
	C205-C208	ELECT. CAPACITOR	CEAS4R7M50
	C209	ELECT. CAPACITOR	CEAS470M16
	C210	ELECT. CAPACITOR	CEAS101M10
	C211	ELECT. CAPACITOR	CEAS4R7M50
	C213	ELECT. CAPACITOR	CEAS010M50
	C214	ELECT. CAPACITOR	CEAS101M10
	C217	AUDIO FILM CAPACITOR	CFTXA222J50
	C218	ELECT. CAPACITOR	CEAS4R7M50
	C219	ELECT. CAPACITOR	CEAS470M16
	C221	AUDIO FILM CAPACITOR	CFTXA222J50
	C222	ELECT. CAPACITOR	CEAS101M10
	C251-C254	ELECT. CAPACITOR	CEAS010M50
	C255	ELECT. CAPACITOR	CEAS101M16
	C257-C260	ELECT. CAPACITOR	CEAS100M50
	C261, C262	AUDIO FILM CAPACITOR	CFTYA104J50
	C263, C264	AUDIO FILM CAPACITOR	CFTYA683J50
	C265, C266	ELECT. CAPACITOR	CEAS100M50

Mark	No.	Description	Part No.
	C267	ELECT. CAPACITOR	CEAS470M16
	C269, C270	ELECT. CAPACITOR	CEAS100M50
	C271-C274	AUDIO FILM CAPACITOR	CFTXA822J50
	C275	ELECT. CAPACITOR	CEAS470M16
	C293, C294	AUDIO FILM CAPACITOR	CFTYA103J50
	C321, C322	ELECT. CAPACITOR	CEASR68M50
	C351, C352	ELECT. CAPACITOR	CEAS221M10
	C353-C356	ELECT. CAPACITOR	CEAS4R7M50
	C357, C358	CERAMIC CAPACITOR	CKCYF473Z50
	C359, C360	AXIAL CAPACITOR	CKPUYB221K50
	C361	ELECT. CAPACITOR	CEAS470M16
	C451	ELECT. CAPACITOR	CEAS330M16
	C453	CAPACITOR	CQPA682J100
	C454	AUDIO FILM CAPACITOR	CFTYA223J50
	C455-C457	CERAMIC CAPACITOR	CGCYX332K25
	C458	ELECT. CAPACITOR	CEAS330M16
	C459	ELECT. CAPACITOR	CEAS470M16
	C501-C503	CERAMIC CAPACITOR	CKCYF103Z50
	C504	AXIAL CAPACITOR	CKPUYB221K50
	C513	ELECT. CAPACITOR	CEAS470M16
	C651, C652	CERAMIC CAPACITOR	CGCYX103K25
	C653, C654	AXIAL CAPACITOR	CKPUYB821K50
	C655, C656	CERAMIC CAPACITOR	CGCYX223K25
	C657, C658	CERAMIC CAPACITOR	CGCYX473K25
	C659, C660	CERAMIC CAPACITOR	CCSL101K500
	C661, C662	CERAMIC CAPACITOR	CG100S
	C663	AXIAL CAPACITOR	CKPUYB101K50
	C664	ELECT. CAPACITOR	CEASR22M50
	C667	ELECT. CAPACITOR	CEAS100M50
	C701, C702	AXIAL CAPACITOR	CKPUYB101K50
	C703, C704	ELECT. CAPACITOR	CEAS010M50
	C705	ELECT. CAPACITOR	CEAS470M16
	C706	CERAMIC CAPACITOR	CKCYF473Z50
	C707, C708	ELECT. CAPACITOR	CEAS100M50
	C709	CERAMIC CAPACITOR	CKCYF473Z50
	C711, C712	AXIAL CAPACITOR	CKPUYB101K50
	C713	ELECT. CAPACITOR	CEAS470M16
	C723, C724	AXIAL CAPACITOR	CKPUYB101K50
	C756	CERAMIC CAPACITOR	CKCYF473Z50
	C801, C851	CERAMIC CAPACITOR	CKPUYB102K50

RESISTORS

⚠	R1002	METAL OXIDE RESISTOR	RSLMF2J1J
⚠	R1020	FUSLIBLE RESISTOR	RF1/4L470J
	R1023	METAL OXIDE RESISTOR	RSLMF1B0J
	R1609	METAL OXIDE RESISTOR	RSLMF2Z1J
	R1702	LADDER RESISTOR	RC1020
	R321, R322	CARBON FILM RESISTOR	RC1028
	R451	CARBON FILM RESISTOR	RD1/2LMF1010J
	R461	CARBON FILM RESISTOR	RD1/2LMF6800J
	R467	CARBON FILM RESISTOR	RD1/2LMF3150J
	R501	RESISTOR ARRAY (22K)	RA-C223J
	R515	RESISTOR ARRAY (22K)	RA-C683J
	R516	RESISTOR ARRAY (68K)	RA-C683J
	VR101-VR104	VR	RC-0047

Mark	No.	Description	Part No.
	VR2002	VARIABLE RESISTOR	RCV1089
	VR321, VR322	VR	RCP1046
	VR651, VR652	VR	RCP1046
	VR801	VR	RCP1044
	VR851	VR	RCP1019
	VR852	VR	RCP1044
	OTHER RESISTORS		RD1/6PM□□□J
OTHERS			
	JA1401, JA1402	JACK	RKN1004
	JA1403	JACK	PKN1005
	JA2003	JACK	RKN1002
	JA701	JACK	RKB-020
	CN101, CN102	CONNECTOR POST	B3B-PH-K
	CN1503	30P CONNECTOR	52045-3145
	CN451	CONNECTOR POST	B2B-PH-K
	X501	CERAMIC RESONATOR	VSS1014
	PCB BINDER		VEF1040
	EARTH PLATE		VNF-091

SUB UNIT

SEMICONDUCTORS

D1505-D1510	DIODE	1SS254
D1512-D1514	DIODE	1SS254
D516, D517	DIODE	1SS254
D523-D526	DIODE	1SS254
D527	LED	SEL6210S
Q1501	DIGITAL TRANSISTOR	DTA114TS
Q502	TRANSISTOR	2SA1309A
Q503	TRANSISTOR	XDC124ES

SWITCHES AND RELAYS

S1501-S1504	SWITCH	RSG1034
S1506, S1509	SWITCH	RSG1034
S1510-S1526	SWITCH	RSG1034
S1529, S1530	SWITCH	RSH1041

RESISTORS

ALL RESISTORS		RD1/6PM□□□J

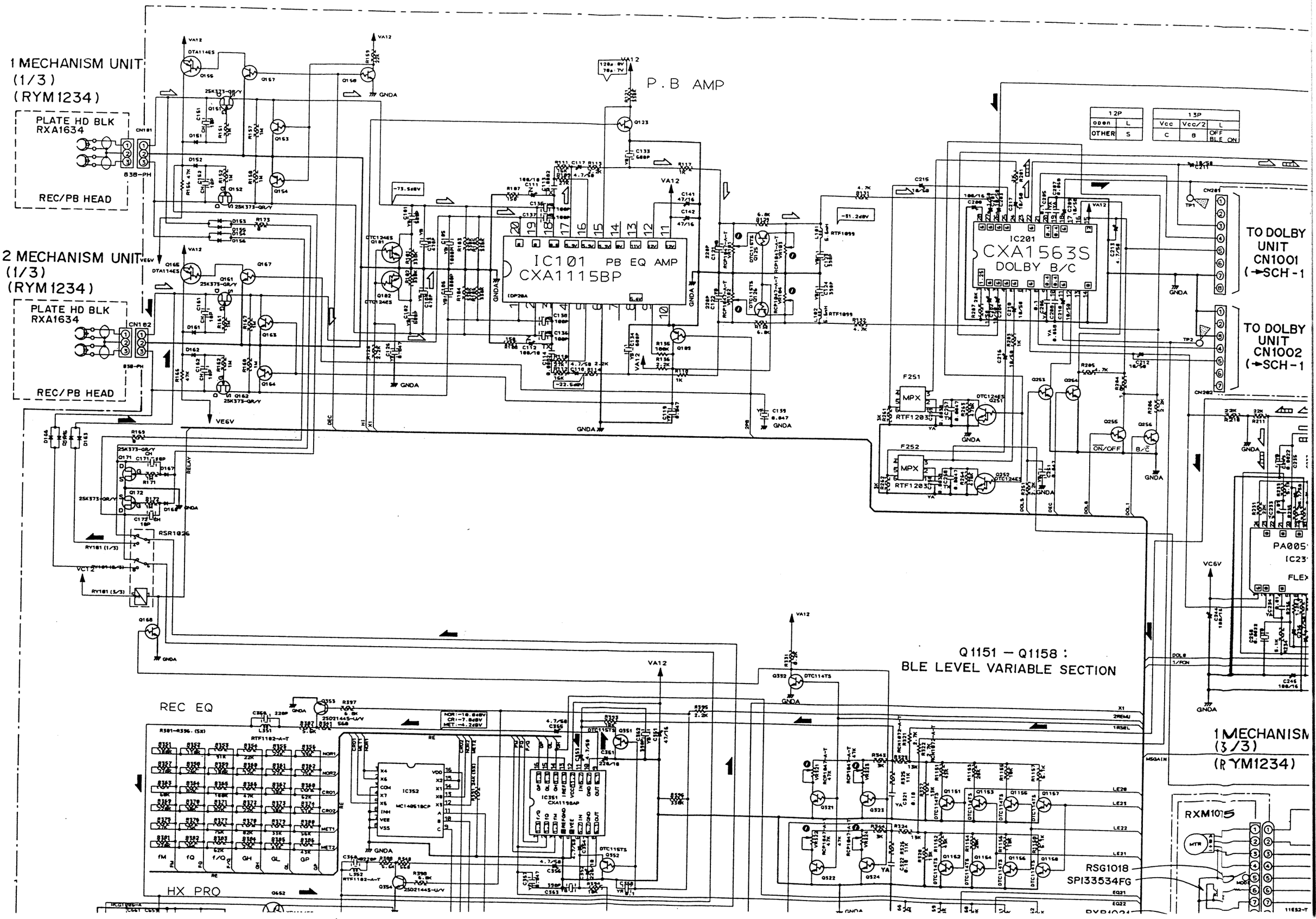
OTHERS

CN1501	CONNECTOR	9603S-31F
V1501	FL INDICATOR TUBE	RAV1132

TRANSFORMER 2 UNIT

This unit has no service parts.

2. MAIN, SUB AND TRANSFORMER 2 UNIT



SIGNAL ROUTE
: PLAYBACK SIGNAL
: RECORDING SIGNAL
: RECORDING MONITOR SIGNAL

MAIN UNIT
(RWZ3172 : KUXJ, KCXJ)
(RWZ3157 : HEM, HEMXJ)

KUXJ, KCXJ ONLY

MIC AMP
IC2001 (2/2) XRA15218
IC2001 (1/2) XRA15218

H. PHONE AMP
IC1601 (1/2) XRA15218N
IC1601 (2/2) XRA15218N

TO DOLBY S UNIT CN1001 (→SCH-1)

TO DOLBY S UNIT CN1002 (→SCH-1)

IC701 (1/2) XRA15218
IC701 (2/2) XRA15218

BLE PILOT SIGNAL FILTER
400Hz L.P.F
XRA15218 (C554 (1/2))
(C554 (2/2)) XRA15218
3kHz Buffer AMP
400Hz LEVEL ADJ.
3kHz LEVEL ADJ.
10kHz LEVEL ADJ.

METER AMP
XRA10393 (IC903 (1/2))
(C903 (2/2)) XRA10393

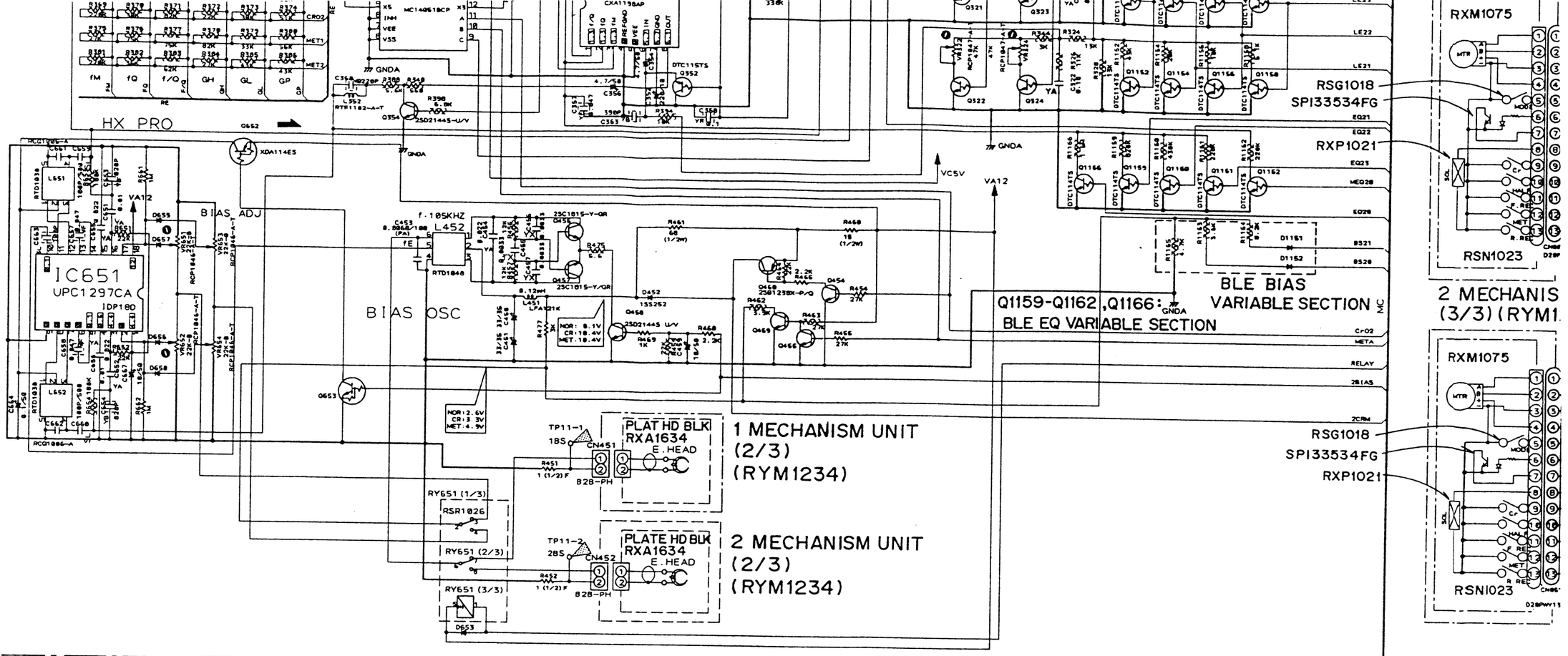
MC14050BCP
IC1701

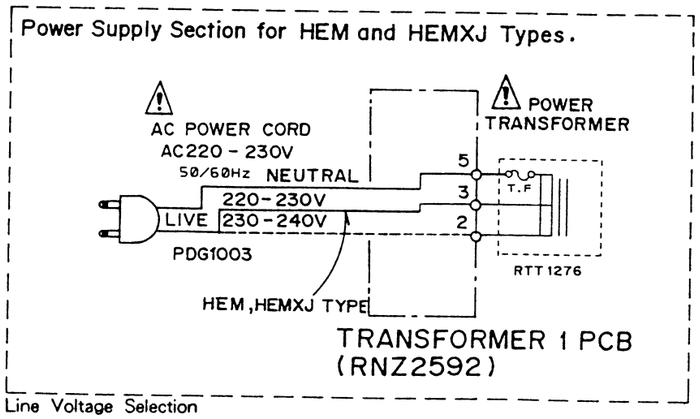
PA0059AM
IC231
FLEX

1 MECHANISM UNIT
(3/3)
(RYM1234)

RXM1075

IC501 : SYSTEM CONTROL

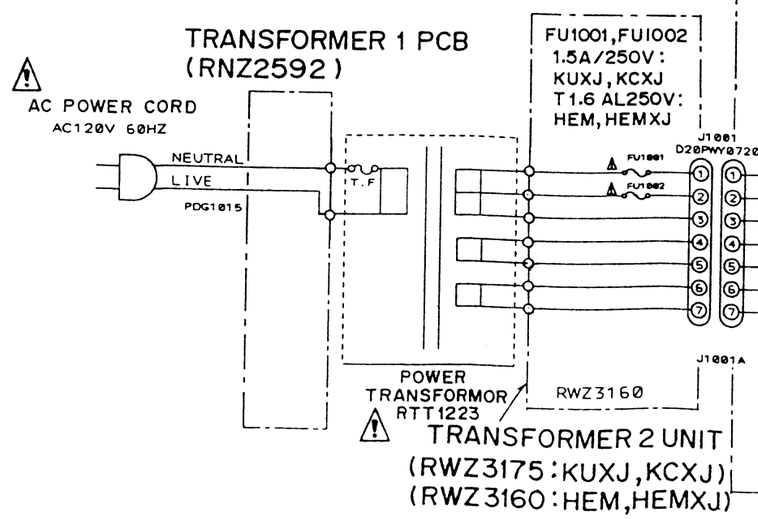


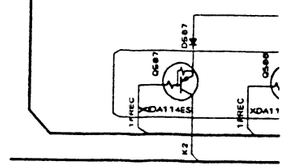


Line Voltage Selection

Line voltage can be chaged by the following modification :
1. Disconnect the AC power cord.
2. Remove the cover.
3. Chenge the connection of TRANSFORMER 1 PCB primary pins.
4. Stick a line voltage label on the rear panel.

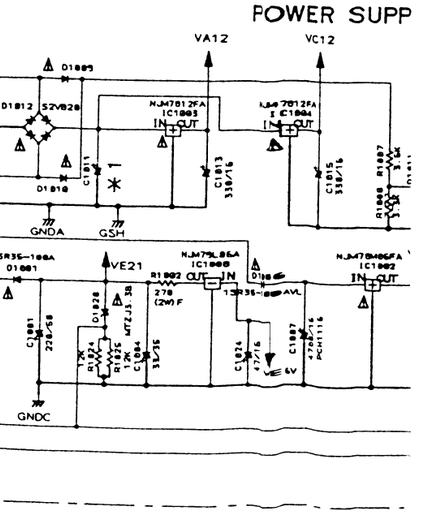
Part No.	Description
AAX - 193	220V label
AAX - 192	240V label





*1

	KUXJ, KCXJ	HEM, HEMXJ
C1011	RCH1116 4700/25	RCH1120 4700/35



SCH-2

MAIN UNIT, SUB UNIT,
TRANSFORMER 2 UNIT

IC501 : SYSTEM CONTROL

IC502 : EXPANDER IC

2 MECHANISM UNIT (3/3) (RYM1234)

RSN1023

RXM1075

RSN1023

KUXJ,KCXJ	HEM,HEMXJ
RCH1116	RCH1120
4700/25	4700/35

POWER SUPPLY

RESET

CD SYNC.

SR

SUB UNIT
(RWZ3173 : KUXJ, KCXJ)
(RWZ3158 : HEM, HEMXJ)

S1501–1527 : RSG1034

NOTE : If the parts are not identified in the diagram the followings are used.

- ISS254
- 2SA1309 (R/S)
- 2SC3311 (R/S)
- DTA114TS
- DTC114TS
- XDA114ES
- XDC124ES

MAIN UNIT, SUB UNIT, TRANSFORMER 2 UNIT

SCH—2